

Amendments to the Claims:

Please amend claims 19 and 40 as indicated in the listing of claims.

Please cancel claims 38 and 39 without prejudice or disclaimer.

Please add new claims 41-44 as presented below.

The listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 18 (Canceled)

19. (Currently Amended) An isolated antibody that specifically binds to a ~~substantially pure~~ fibroblast growth factor homologous factor-4 (FHF-4) polypeptide, wherein the FHF-4 polypeptide comprises the amino acid sequence as set forth in SEQ ID NO: 4 or SEQ ID NO: 11.

20. (Original) The antibody of claim 19, wherein the antibody is monoclonal.

21. (Withdrawn) A method of detecting a cell proliferative disorder associated with expression of a fibroblast growth factor homologous factor-4 (FHF-4) polypeptide, the method comprising the steps of:

- a. contacting a specimen from a subject having or suspected of having the disorder with a reagent that detects expression of the FHF-4 polypeptide; and
- b. detecting binding of the reagent to the specimen.

22. (Withdrawn) The method of claim 21, wherein the cell is a brain cell.

23. (Withdrawn) The method of claim 21, wherein the reagent is an antibody.

24. (Withdrawn) The method of claim 21, wherein the reagent is a nucleic acid.

25. (Withdrawn) The method of claim 24, wherein the nucleic acid hybridizes to a nucleic acid encoding the FHF-4 polypeptide.

26. (Withdrawn) The method of claim 24, wherein the nucleic acid hybridizes to the complement of a nucleic acid encoding the FHF-4 polypeptide.

27. (Withdrawn) The method of claim 21, wherein the detecting is carried out *in vivo*.

28. (Withdrawn) The method of claim 21, wherein the detecting is carried out *in vitro*.

29. (Withdrawn) The method of claim 21, wherein the reagent comprises a detectable label.

30. (Withdrawn) A method of treating a cell proliferative disorder associated with expression of a fibroblast growth factor homologous factor-4 (FHF-4) polypeptide, the method comprising administering to a subject having or suspected of having the disorder a reagent that suppresses the activity of the FHF polypeptide.

31. (Withdrawn) The method of claim 30, wherein the reagent is an anti-FHF-4 antibody.

32. (Withdrawn) The method of claim 30, wherein the reagent is a nucleic acid that hybridizes to a nucleic acid encoding the FHF-4 polypeptide.

33. (Withdrawn) The method of claim 30, wherein the cell is a brain cell.

34. (Withdrawn) The method of claim 30, wherein the reagent is introduced into the cell using a carrier.

35. (Withdrawn) The method of claim 34, wherein the carrier is a vector.

36. (Withdrawn) A method of identifying a nucleic acid encoding a fibroblast growth factor homologous factor-4 (FHF-4) polypeptide, the method comprising probing a sample containing a nucleic acid encoding the FHF-4 polypeptide with an FHF-4-specific nucleic acid probe.

37. (Withdrawn) The method of claim 36, wherein the FHF-4-specific nucleic acid probe hybridizes to:

- a. a nucleic acid that encodes seven consecutive amino acids, at least four of which are conserved in the amino acid sequence of FHF-4 (SEQ ID NO:4); or
- b. the complementary sequence thereto.

38. (Canceled).

39. (Canceled).

40. (Currently Amended) The antibody of claim 19 ~~having~~ which is an antigen binding antibody fragment that is a Fab fragment or an F(ab')₂ fragment.

41. (New) The antibody of claim 40, wherein the antibody fragment is a Fab, Fab', (Fab')₂, Fv, or SCA fragment.

42. (New) The antibody of claim 19, which is bound to a carrier.

43. (New) The antibody of claim 42, wherein the carrier is glass, polystyrene, polypropylene, polyethylene, dextran, a Nylon.TM carrier, cellulose, polyacrylamide, agarose, or magnetite.

44. (New) The antibody of claim 19, which comprises a detectable label.

45. (New) The antibody of claim 44, wherein the detectable label is an enzyme, radioisotope, fluorescent compound, colloidal metal, chemiluminiscent compound, phosphorescent compound, bioluminescent compound, or paramagnetic isotope.

46. (New) The antibody of claim 19, which is coupled to a ligand.
47. (New) The antibody of claim 46, wherein the ligand is biotin, dinitrophenyl, puridoxal, or fluorescein.